UNIVERSAL WINDOW TIMES JANUARY 1982 thru DECEMBER 1982



Varian EIMAC

301 Industrial Way San Carlos, California The following Universal Window times are based on the new specifications outlined in AS-49-12. The moon is always at a north, or positive, declination during the European Universal Window. The start of the window is two hours from the setting moon time in Frankfurt, Germany. The end of the window is when the moon sets at this same location. The level of activity in any of the windows will depend upon how reasonable the time of the day is. Early hours in the morning on working days will not be too attractive to many operators. The last hour of the window will be the most popular time for those stations with antennas pointing toward the horizon.

The times were calculated in two minute increments; therefore, there can be up to a plus or minus two minute error.

Also included are the times each month for the new moon. During the summer months the moon and the sun appear to be in the same place in the sky. The sun noise can therefore mask any moonbounce signals. At least one day can be lost, and perhaps more, depending upon the directivity of the antenna arrays at both ends of the path.

1982	New Moon	<u>Perigee</u>	Apogee
January	25	8	20
February	23	5	17
March	25	4, 29	17
April	23	25	14
May	23	24	11
June	21	21	7
July	20	19	5
August	19	17	1, 29
September	17	13	25
October	17	9	23
November	15	4	20
December	15	2, 30	18

JANUARY	FEBRUARY	MARCH
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 26 27 28 29 30 31	5 M 1 W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 28 24 25 26 27 28	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
APRIL	MAY	JUNE
S M T W T F S 1 2 3 4 5 6 7 3 9 10 11 12 13 14 15 16 17 18 19 20 21 22 28 24 25 26 27 28 29 30	S M T W T F S 2 3 4 5 6 7 8 9 10 (11) 12 13 14 15 16 17 18 19 20 21 22 24 (24) 25 26 27 28 29 30 31	S M T W T F S 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 20 22 23 24 25 26 27 28 29 30
JULY	AUGUST	SEPTEMBER
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 (19) 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 (17) 18 > 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 (13) 14 15 16 27 18 19 20 21 22 23 24 25 26 27 28 29 30
OCTOBER	NOVEMBER	DECEMBER
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 08 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 NEW MOON PERIGEE APOGEE UWIND	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 5 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

JANUARY-1982		FEBRUARY-1982		MARCH-1982	
Day 3-4 4-5 6 8 9 10 11 12 13 14 15 30 31	UT 2222-0022 2340-0140 0100-0300 0336-0536 0447-0647 0545-0745 0630-0830 0708-0908 0737-0937 0802-1002 0823-1023 2010-2210 2125-2325	Day 1-2 3 4 5 6 7 8 9 10 11 26 27 28	UT 2242-0042 0000-0200 0117-0317 0227-0427 0330-0530 0421-0621 0502-0702 0535-0735 0602-0802 0625-0825 1800-2000 1915-2115 2032-2232	Day 1 2-3 4 5 6 7 8 9 10 11 26 27 28 29 30-31	UT 2149-2349 2306-0106 0017-0217 0121-0321 0215-0415 0257-0457 0332-0532 0402-0602 0425-0625 0447-0647 1700-1900 1819-2019 1938-2138 2057-2257 2300-0100
APRIL-1	982	MAY-198	32	JUNE-19	182
Day 31-1 2 3 4 5 6 7 22 23 24 25 26 27 28-29 29-30	UT 2317-0117 0012-0212 0059-0259 0134-0334 0204-0404 0229-0429 0251-0451 1435-1635 1555-1755 1717-1917 1838-2038 1957-2157 2110-2310 2300-0100	Day 30-1 2 3 4 5 20 21 22 23 24 25 26 27 28-29 29-30 30-31	UT 2338-0138 0010-0210 0036-0236 0057-0257 0117-0317 1325-1525 1447-1647 1610-1810 1732-1932 1851-2051 2000-2200 0055-2255 2140-2340 2215-0015 2242-0042 2304-0104	Day 31-1 16 17 18 19 20 21 22 23 24 25 26 27	UT 2325-0125 1100-1300 1217-1417 1338-1538 1502-1702 1623-1823 1738-1938 1842-2042 1934-2134 2014-2214 2045-2245 2110-2310 2132-2332

JULY-1982		AUGUST-1982		SEPTEMBER-1982	
Day 14 15 16 17 18 19 20 21 22 23 24 25	UT 0959-1159 1115-1315 1235-1435 1355-1555 1513-1713 1621-1821 1721-1921 1806-2006 1842-2042 1910-2110 1935-2135 1956-2156	Day 10 11 12 13 14 15 16 17 18 19 20 21	UT 0749-0949 0902-1102 1018-1218 1136-1336 1252-1452 1404-1604 1506-1706 1557-1757 1636-1836 1708-1908 1731-1931 1757-1957	Day 6 7 8 9 10 11 12 13 14 15 16 17	UT 0539-0739 0653-0853 0809-1009 0925-1125 1041-1241 1154-1354 1258-1458 1351-1551 1433-1633 1506-1706 1534-1734 1559-1759 1620-1820
OCTOBER	R-1982	NOVEMBE	ER-1982	DECEMBE	R-1982
Day 3 4 5 6 7 8 9 10 11 12 13 14 15 31	UT 0323-0523 0440-0640 0557-0757 0715-0915 0832-1032 0947-1147 1053-1253 1149-1349 1234-1434 1310-1510 1358-1538 1402-1602 1423-1623 0217-0417	Day 1 2 3 4 5 6 7 8 9 10 11 26-27 28 29 30	UT 0334-0534 0455-0655 0615-0815 0734-0934 0846-1046 0947-1147 1036-1236 1114-1314 1144-1344 1208-1408 1230-1430 2351-0151 0105-0305 0225-0425 0347-0547	Day 1 2 3 4 5 6 7 8 9 24-25 25-26 27 28 29 30 31	UT 0510-0710 0627-0827 0736-0936 0832-1032 0915-1115 0949-1149 1015-1215 1037-1237 1057-1257 2242-0042 2357-0157 0117-0317 0238-0438 0359-0559 0514-0714 0616-0816